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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,710	08/16/2001	Lloyd E. Thorsbakken	RA 5372 (33012/317/101)	3426

5909 7590 08/30/2004

NAWROCKI, ROONEY & SIVERTSON
SUITE 401, BROADWAY PLACE EAST
3433 BROADWAY STREET NORTHEAST
MINNEAPOLIS, MN 554133009

EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,710

Applicant(s)

THORSBAKKEN ET AL.

Examiner

Clifford H Knoll

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to communication filed 5/28/2004. Currently claims 1-20 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-20 stand rejected under 35 U.S.C. 102(e) as being anticipated by Bell (US 6330630).

Regarding claim 1, Bell discloses the first and second data buses (e.g., col. 5, lines 7-9) and a circuit responsively coupled to both which combines the buses into a logical bus having a third set of different characteristics (e.g., col. 5, lines 16-19).

Regarding claim 2, Bell also discloses the characteristics are maximum transfer rates and that the third rate is greater than either of the first two (e.g., col. 5, lines 16-19).

Regarding claim 3, Bell also discloses the third transfer rate is the sum of the first and second rates (e.g., col. 17, lines 60-63).

Regarding claim 4, Bell also discloses the first and second maximum transfer rates are equal (e.g., col. 5, lines 7-9).

Regarding claim 5, Bell also discloses the rate is 33 MHz (e.g., col. 5, line 9).

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Regarding claim 6, Bell discloses buses coupled between components (e.g., col. 5, lines 7-9) and a circuit responsively coupled to both which combines the buses into a logical bus (e.g., col. 5, lines 16-19).

Regarding claim 7, Bell also discloses the first and second characteristics of the buses and the third different characteristic (e.g., col. 5, lines 16-19).

Regarding claim 8, Bell also discloses first and second data transfer rates as the characteristics and a third transfer rate characteristic greater than either of the said first and second (e.g., col. 5, lines 16-19).

Regarding claim 9, Bell also discloses the third transfer rate is the sum of the first and second rates (e.g., col. 17, lines 60-63).

Regarding claim 10, Bell also discloses the first and second maximum transfer rates are equal (e.g., col. 5, lines 7-9).

Regarding claim 11, Bell discloses first and second data bus provision (e.g., col. 5, lines 7-9) and combining the buses into a logical bus with third set of characteristics (e.g., col. 5, lines 16-19).

Regarding claim 12, Bell also discloses first and second data transfer rates as the characteristics and a third transfer rate characteristic greater than either of the said first and second (e.g., col. 5, lines 16-19).

Regarding claim 13, Bell also discloses the third transfer rate is the sum of the first and second rates (e.g., col. 17, lines 60-63).

Regarding claim 14, Bell also discloses the first and second maximum transfer rates are equal (e.g., col. 5, lines 7-9).

Regarding claim 15, Bell also discloses the rate is 33 MHz (e.g., col. 5, line 9).

Regarding claim 16, Bell discloses first and second means for performing data processing functions (e.g., col. 5, lines 20-25, "processor 10 or other processors", "90A and 90B"), first and second means coupled between processing means for transferring data (e.g., col. 5, lines 7-9) and means for combining the buses into a logical transferring means with third set of characteristics (e.g., col. 5, lines 16-19).

Regarding claim 17, Bell also discloses first and second data transfer rates as the characteristics and a third transfer rate characteristic greater than either of the said first and second (e.g., col. 5, lines 16-19).

Regarding claim 18, Bell also discloses the third transfer rate is the sum of the first and second rates (e.g., col. 17, lines 60-63).

Regarding claim 19, Bell also discloses the first and second maximum transfer rates are equal (e.g., col. 5, lines 7-9).

Regarding claim 20, Bell also discloses the rate is 33 MHz (e.g., col. 5, line 9).

Response to Arguments

Applicant's arguments filed 5/28/2004 have been fully considered but they are not persuasive.

Applicant argues that Bell in Figure 1 shows that buses 90A and 90B are not both coupled to the same two components; however, as cited, Bell quite clearly states that "bus expander bridge 80 can also be configured to combine multiple PCI buses to

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provide a single PCI bus having increased bandwidth" (col. 5, lines 16-19), and subsequently, in further detail states: "In 64-bit mode, PCI buses 90A and 90B connected to bridge 80A are combined to form a single 64-bit wide PCI bus, and data queues or buffers from both sides A and B can be used for 64-bit mode.... In 64-bit mode, bridge 80A can similarly issue either a single large (e.g., 4-line) read request packet, or multiple (e.g., two) smaller (e.g., 2-line) read request packets" (col. 17, line 58 – col. 18, line 4). This combination of two separate buses into a single logical bus anticipates the invention, irrespective of the 32 bit mode illustrated in Figure 1; in fact, it is necessary to interpret the passages quoted to understand the anticipatory nature of Bell. In particular, the teaching of a "single large read request" quoted supra, quite clearly shows a coupling which "combines the buses into a logical bus" as claimed.

The citation in the rejection maintained above, and the additional passage quoted supra will hopefully serve to make the anticipatory nature of Bell clear.

Thus the rejection using Bell is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

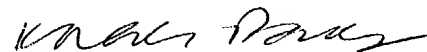
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 703-305-8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



chk

Khanh Dang
Primary Examiner